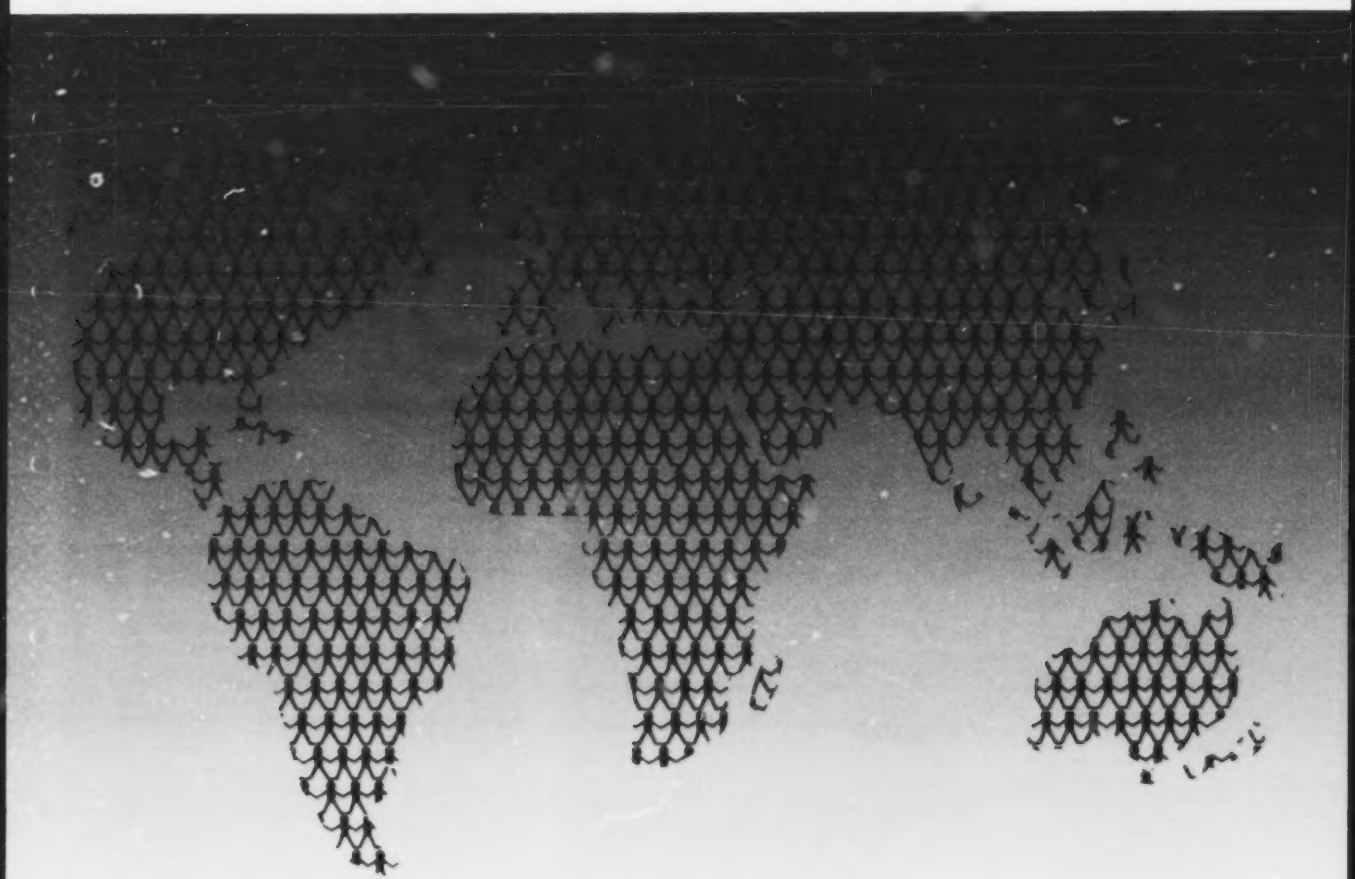
CHILD SURVIVAL AND POPULATION GROWTH



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THE STATE OF THE WORLD'S CHILDREN

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CHILD SURVIVAL AND POPULATION GROWTH

Chapter 5 of
The State of the World's
Children 1991

On September 30th 1990, the representatives of over 150 nations came together for the first *World Summit for Children*. One outcome was a set of specific commitments designed to reduce child deaths and child malnutrition by the year 2000. The 1991 *State of the World's Children* report discusses the action needed to keep this promise in the decade ahead, and describes the low-cost means now available for protecting children's lives and growth. The report also analyses the successful attempt to reach a previous target set by the international community - the goal of immunizing 80% of the developing world's children by the end of 1990.

If the promise of the *World Summit for Children* is kept, and the health and well-being of the world's children is substantially improved in the 1990s, then one consequence will be the prevention of many millions of child deaths each year. The following chapter, extracted from the report, examines the effect this might have on the rate of population growth in the developing world. It concludes that, paradoxically, today's potential for protecting the lives of children would help to alleviate, rather than exacerbate, the population problem.

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The population question

The potential to reduce under-five deaths by at least one third in the next 10 years raises a question, in many minds, about the demographic consequences of such action. Would the saving of so many lives lead to even greater population pressures in the future?

In fact, the process of reducing child deaths is an essential part of the process of reducing birth rates.

Furthermore, the present potential for lowering death rates comes at a time when family planning programmes have been adopted and birth rates have begun to fall in almost every region of the developing world. Because of this, and because of the particular stage which most developing countries have now reached in the transition to lower birth rates, there is every reason to believe that further falls in under-five death rates would be associated with even steeper falls in births.

Finally, as this brief overview of the issue will show, the particular methods by which child deaths could now be reduced also happen to be among the most effective methods of reducing births.

For all of these reasons, the Plan of Action adopted by the heads of states and governments at the recent World Summit for Children expressly noted that *"the achievement of these goals would also contribute to lowering population growth"**.

Four forces

The pattern of forces which conspire to bring down birth rates, and the relative weights of the various factors involved, have been the subject of a great deal of research in recent years and are still not completely understood. But several consistent elements in that process have been broadly identified, of which four will be touched upon here:

1. Economic progress: Rising living standards, modernization, and urbanization, are usually accompanied by falling birth rates. A major reason is that economic progress tends to erode the advantages of large families (for example, help in fields and homes, and security in illness or old age) and to increase the cost of having children (for example, by adding to the expenditures necessary to house, feed, clothe and educate a child in accordance with the norms of a better-off society).

There are, however, several important examples, notably China, Sri Lanka and the Indian state of Kerala, where birth rates have been brought down to very low levels in the *absence* of significant growth in GNP per capita. In all of these examples, fertility has been reduced to almost industrialized world levels while per capita GNP remains at little more than $400 a year. The common feature in all of these cases is *social* progress - especially in education and health.

2. Improvements for women: Of all the factors associated with falling birth rates, the one which is perhaps most closely and consistently correlated is improvement in the lives of women - in their status, in their emancipation and education, in their opportunities beyond childbearing, and in their acquiring not only the knowledge and the means but also the right to decide for themselves how many children they will have and when. In particular, the education of women seems to be one of the most consistently powerful factors in reducing birth rates.

3. Family planning programmes: Falling birth rates are also closely correlated with the availability of family planning education and services. In particular, the time-lag between falling death rates and falling birth rates can be abbreviated if the knowledge and the means of planning births are widely available to those families who wish to use them. Plotting the many different patterns by which countries have moved towards lower death rates and lower birth rates, it can be seen that those countries with strong family planning programmes have normally been able to translate progress in reducing

* The goals themselves include *"Access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many"*.

deaths into progress in reducing births more quickly than those which do not.

4. Reduced child deaths: Another well-established element in catalyzing the transition to lower birth rates is the sustained reduction of child deaths. And it is striking that this is the factor common to all those countries, mentioned above, which have achieved very low birth rates while per capita incomes remain very low. Treating Kerala (population 29 million) as a country for the sake of the argument, it is worth pondering the statistic that China, Sri Lanka, and Kerala would all feature in the list of the 10 developing countries with the lowest fertility rates, the 20 developing countries with the lowest under-five mortality rates, and the 40 developing countries with the lowest per capita incomes. It is also worth remarking that if social progress had brought all of South Asia to the point at which under-five death rates and birth rates were at the levels prevailing today in Sri Lanka, then the region as a whole would see 5.2 million fewer child deaths each year - *and 14.3 million fewer births.*

Several mechanisms link lower child death rates to lower birth rates and, as this factor is the one which most commonly gives rise to concern about population growth, it is worth summarizing those mechanisms briefly here.

First, an infant death ends the suppression of ovulation which is caused by breast-feeding. In the absence of any other method of birth planning, a new pregnancy becomes more likely.

Second, the death of a child can also prompt couples to 'replace' the loss by a new pregnancy sooner than would otherwise have been the case.

Third, when child death rates are high, many parents compensate for the anticipated loss of one or more of their children by giving birth to more children than they actually want or by not progressing to the stage of consciously planning the size of their families. Compounded by such factors as gender preference and the time-lag between changes in death rates and changes in *perceived* risks, this 'insurance effect' is a major reason for the persistence of high birth rates. Reducing child deaths can therefore help societies to move towards family building by design rather than by chance. This factor seems to become significant when child deaths become very unlikely from the parents' point of view. The process of family building then becomes more predictable, confidence begins to grow, and the 'insurance factor' begins to weaken. And it is this point in the process which many nations of the developing world are now approaching (see figure opposite).

The confidence factor is an important one. When the relationship between the number of births and the number of surviving children is unpredictable and uncontrollable, then the idea of consciously planning a family of a specific size is not a proposition which can be easily accepted. Conversely, when child death rates fall and the relationship between the number of births and eventual family size becomes more predictable, planning becomes a more reasonable proposition. From the demographic record of many nations, the United Nations Population Division has concluded:

"Improvements in child survival, which increase the predictability of the family building process, trigger the transition from natural to controlled fertility behaviour. This in turn generates the need for family planning."

Synergisms

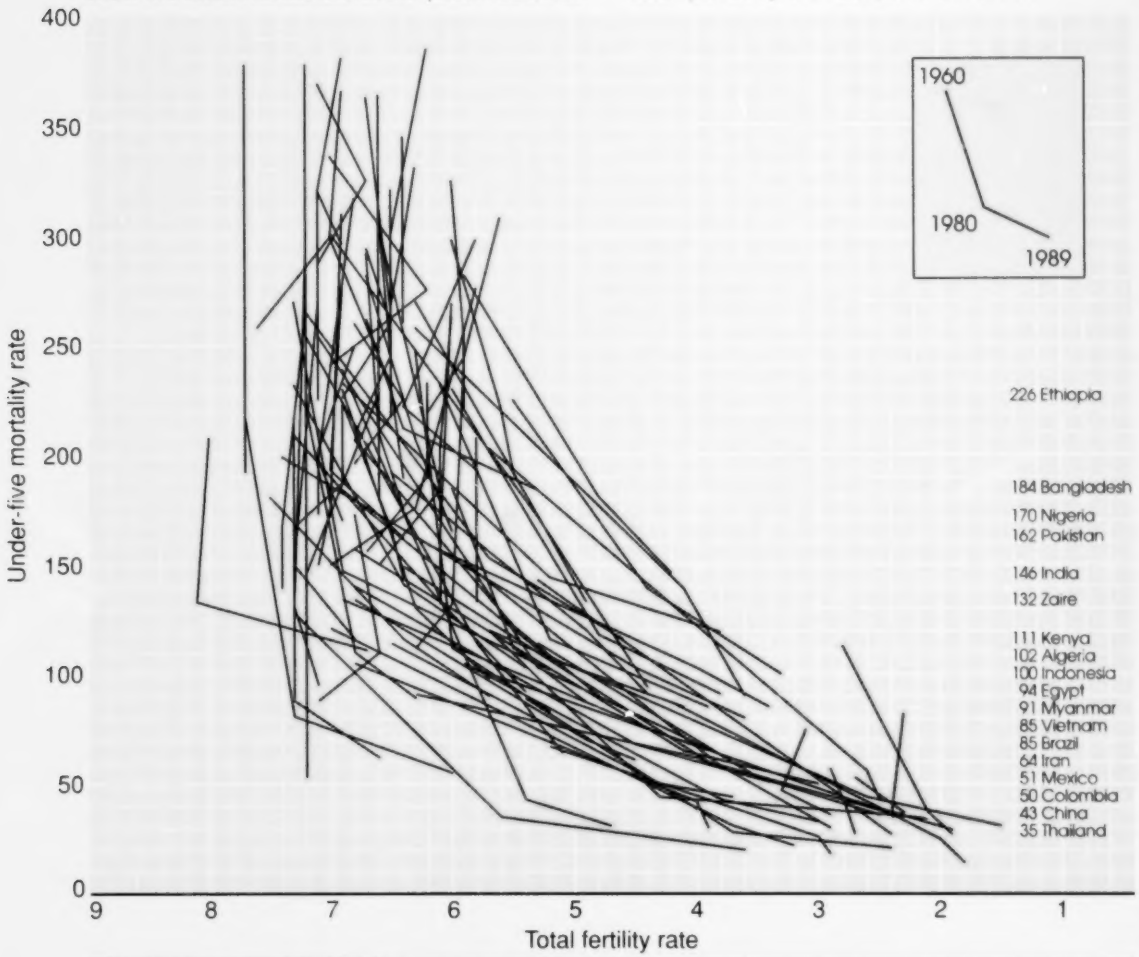
In practice, these four broad factors in the transition to lower birth rates are synergistically related. Economic progress can assist women's advancement; women's advancement helps to reduce child deaths; reduced child deaths help to lower birth rates; lower birth rates help women's advancement. Or, to follow a different strand through this cat's cradle of synergisms, women's advancement (and especially secondary education) makes family planning more likely; family planning reduces both child deaths and child births; slower population growth can assist economic progress; economic progress can lead to lower birth rates, etc. etc.

The net result of thousands of such possible interconnections is that the whole is much

Under-five mortality rate (U5MR) and total fertility rate (TFR), 1960,1980 and 1989, all developing countries

Each line on the chart represents, for one developing country, the change in under-five mortality rate (U5MR) and total fertility rate (TFR) over the period from 1960 to 1989. The intermediate point on each line represents the point at 1980.

Almost all developing countries are represented on the chart. It shows that the initial steep falls in under-five death rates were often not accompanied by any significant change in fertility. Later, when under-five deaths fall still further, the pattern becomes mixed – with some countries showing significant falls in fertility and some not. In the later stages, further reduction of under-five deaths is – with very few exceptions – accompanied by even steeper falls in births. On the right hand side of the graph is shown the present under-five mortality rate of some of the most populous developing countries today. It can be seen that most are close to the level at which further falls in under-five deaths could be expected to be accompanied by even steeper falls in births.



Source: UNICEF, adapted from data supplied by the United Nations Population Division.

greater than the sum of the parts; all of these forces acting together will exert a far greater downward pressure on birth rates than any one of them acting alone. Conversely, lack of progress in one area can inhibit progress in others: few countries, for example, have a rate of acceptance of family planning beyond 35% (of all couples of childbearing age) while under-five mortality rates remain much above 100 per 1,000 births; and it is uncommon to find under-five mortality rates below 100 if family planning acceptance remains much below 35%. The two are dynamically linked, and can progress most quickly if in step with each other. This is explicitly acknowledged by the Plan of Action adopted by the World Summit for Children which comments:

"There is an added benefit of promoting maternal and child health programmes and family planning together in that, acting synergistically, these activities help accelerate the reduction of both mortality and fertility rates, and contribute more to lowering rates of population growth than either type of activity alone."

In the context of overall development, all of these basic factors in fertility decline - improvements in the lives of women, reduced child deaths, and the availability of family planning - are important priorities *in themselves*. All of them make a direct contribution to improving the lives of millions of people; the fact that they *also* make a strong synergistic contribution to solving the population problem, and that they can all be accomplished at a relatively modest cost, adds up to what should be an irresistible case for simultaneous action on all of these fronts in the decade ahead.

A particular compatibility

In addition to this general compatibility, the present potential for reducing child deaths is especially compatible with the need to reduce birth rates for two reasons, one of which has to do with the particular methods by which it might be achieved and the other with the particular time at which it arises.

Three of the most important strategies now available for reducing child deaths - the education of women, the well-informed timing of births, and breast-feeding - also happen to be among the most direct of all methods for reducing child births.

First, the education of mothers, by formal or informal means, is one of the most crucial determinants of children's health and survival. Even when differences in income and residence are allowed for, the survival chances of a child born to a woman with four or more years of primary education are significantly greater than those of a child whose mother has never been to school. The reason for the strength of this tie between maternal education and child survival is not difficult to understand: an educated mother is more likely to be aware of the choices before her, more likely to be confident enough to seek help when needed, more likely to take more control over what happens to her family. By the same token, it is hardly surprising that female education is also associated with family planning and *fewer births*.

Second, the promotion of birth spacing is also one of the most important means by which reductions in child deaths could now be achieved. A great many of those 40,000 children who die each day in the developing world are children born to mothers who are younger than 18, or older than 35, or who have had more than four children already, or who have given birth less than two years after a previous delivery. Infants born closer together than 24 months, for example, are approximately twice as likely to die in early childhood as babies born more than two years apart. Empowering families with that knowledge, and enabling them to act on it by providing culturally acceptable methods of family planning, is therefore one of the powerful levers for preventing both deaths *and births*.

Third, the promotion of breast-feeding is clearly a key element in child health and survival in the 1990s and, as has already been mentioned, on-demand breast-feeding is also an important if not wholly reliable method of preventing conception.

In addition to these direct links between particular means of reducing child deaths and the lowering of birth rates, it is noticeable that most of the other low-cost methods now available for protecting the lives of children fall into the category of those actions which increase parental involvement and parental control over child deaths. For this reason, they are the kind of strategies which are also likely to assist the spread of family planning. Taking a child to be immunized on several occasions in the first year of life, improving weaning methods, checking growth, administering oral rehydration therapy, recognizing the symptoms of acute respiratory infections - all depend on the well-informed and well-supported actions of *parents*. And as the UN Population Division has said:

"Those improvements in child survival that directly involve families are likely to give them a sense of control over their fate in a way that exogenous improvements cannot. Therefore, any given improvement in mortality will be more likely to initiate fertility control behaviour among those who understand and participate in that improvement than among those who do not."

The particular stage

The second factor which makes the year 2000 goals for improved child survival especially compatible with the aim of also reducing birth rates concerns the changed timing and context of the 1990s.

In contrast to the past, a majority of the developing countries are now at a stage when further falls in under-five death rates are likely to result in even steeper falls in birth rates.

The under-five mortality rate, or U5MR, is the number of deaths under the age of five per 1,000 live births. In the first phase of mortality decline, when U5MR first begins to fall from a very high level of 300 or more, birth rates tend to change very little. The great majority of countries in the developing world have now completed this phase. In the next stage, when countries begin to come below a U5MR of 200, there is no particular pattern of fertility change. Some countries have seen quite steep falls in fertility levels during this stage, others continue to see U5MR fall without any significant change in birth rates. In other words, the correlation between falling under-five mortality and falling fertility is very weak in comparison with other factors such as female education or a strong family planning programme. But it is when countries begin to bring the U5MR below 150, and to move towards and through the 100 mark, that very strong and consistent patterns of fertility change begin to emerge. And at this stage, almost all countries see a steeper fall in the number of births for every further fall in under-five mortality (see figure on page 3).

The truly significant point raised by this closer look at the different stages of mortality decline, is that the great majority of developing countries have now passed through the earlier stages of this transition, when fertility may or may not be affected, and are now entering the stage during which further falls in mortality rates could be expected to be associated with very steep falls in fertility rates. In other words, reductions in child deaths have now reached the point where the major dividends in falling birth rates are about to be paid.

Second, past reductions in child deaths have often happened in the absence of, and even hostility towards, family planning programmes. Where this has been the case, birth rates have usually been slow to respond to falling child deaths. Today, almost every developing country has an established, if not always adequately funded, family planning programme. For both of these overlapping reasons, further falls in under-five deaths could be expected to be accompanied by even more significant falls in births.

The population challenge of the next 10 years and beyond is therefore the challenge of 'cutting the corner' on the graph which plots falling mortality against falling fertility so that gains in the former are quickly translated into gains in the latter.

In addition to ,changes in the international economic climate which would enable the de-

veloping world to earn a higher standard of living, that challenge can best be met by a much greater national and international investment in culturally acceptable family planning programmes, in the empowering of parents with today's knowledge, in a significant expansion in educational opportunities - especially for women and girls - and in the achievement of the year 2000 goal of a significant reduction in under-five mortality rates.

Family planning

In conclusion, it should be clearly stated that family planning would still be one of the highest priorities, even if population growth were not a concern. As has been mentioned, the well-informed timing and spacing of births is one of the greatest of all opportunities for improving the health and saving the lives of both women and children in the decade ahead.

For the women of the developing world, child spacing can mean a drastic reduction in illness and disability, in maternal deaths, estimated at 500,000 per year, and in the number of abortions, estimated at more than 100,000 *every day*. For the children of the developing world, the responsible planning of family size can mean better levels of health, nutrition, and education, and is one of the most powerful means of achieving many of the most basic human development goals adopted for the year 2000.

In large measure, the demand for family planning - with respect for religious, cultural and social traditions - already exists. An estimated 300 million couples in the developing world do not want any more children but are not using any effective means of avoiding another pregnancy. Overall, *World Fertility Survey* findings in the 15 most populous developing countries suggest that if women had the power to make their own decisions on the matter, then family size would fall by an average of almost two children and the rate of population increase would drop by up to 30%.

Making it possible for women to exercise that choice would therefore have a significant effect on the health and well-being of women themselves, on the healthy growth and survival of their children, and on the lowering of fertility rates. Few things could achieve as much for the health and well-being of the human race, and few things could do more to give people more control over their own lives - the essence of the development process itself.

When so much could be achieved by the meeting of an existing demand, and at such a relatively small cost, the time has surely come for a major renewal of the effort to ensure that all couples, and especially all women, have the information, the means, the support and the *right* to decide for themselves how many children they will have and when they will have them. It is now 15 years since 140 nations, meeting at the first World Population Conference, agreed that "*all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education, and means to do so*". It is time that this right was made into a reality for the sake of today's mothers and children and for the sake of sustainable human development in the twenty-first century and beyond.

THE STATE OF THE WORLD'S CHILDREN 1991

On September 30th, 1990, the World Summit for Children brought together the largest gathering of Presidents and Prime Ministers in history. The outcome was a promise to the children of the 1990s – a promise to end child deaths and child malnutrition on today's scale by the year 2000 – and to provide basic protection for the normal physical and mental development of all the world's children.

As the Summit met, the world was nearing the deadline, set just over ten years ago, for the achievement of another great human goal – the immunization of 80% of the developing world's children. That goal is expected to have been reached when the final figures for 1990 become available. This extraordinary achievement has saved over 12 million young lives and prevented over one and a half million children from being crippled by polio. It has also given the world new hope by showing what can be achieved when the international community commits itself to a great endeavour.

The Declaration and Plan of Action adopted by the Summit is published with this year's *State of the World's Children* report, as is the full text of the Convention on the Rights of the Child. The report's panels describe all 22 of the specific goals for the year 2000 and show why they are now attainable and affordable. This year's report therefore serves as a basic record of the commitment made by the world community, in respect of its children, for the decade ahead.

The report itself looks at how the year 2000 goals fit into an overall strategy of development in the 1990s and at the question of where the resources will have to come from if the great promise is to be kept.

In chapter 5, the report addresses the question of whether success in reducing child deaths would serve only to add to population and environmental pressures. Its conclusion is that the achievement of the year 2000 goals would help to bring about a stabilization of population growth at an earlier date and at a lower level.

The great effort called for can only be sustained, concludes the report, if a new ethic for children emerges in the 1990s – *"an ethic which grants children a first call on our societies resources in good times and in bad; an ethic which demands that children should be the first to benefit from mankind's successes and the last to suffer from its failures."*

The full edition of *The State of the World's Children 1991*, as outlined above, may be obtained from your local bookshop, price £3.75 ($7.00) or from:

Oxford University Press, 116 High Street, Oxford OX1 4BZ, UK.

Oxford University Press, 200 Madison Avenue, New York 10016, USA.